

SECTION VIII

VIII. APPENDIX B

Each claim is reproduced below in part with the elements identified by reference numerals and the supporting portions of the original specification identified.

Claim 1 - wherein a distance (a) between a vertical line passing through the first center of gravity 144' and a vertical line passing through the second center of gravity 144 is between 0 cm and 14 cm. (See Figure 6, page 2, third full paragraph, and page 11, bridging paragraph.)

Claim 6 - wherein a line passing through the first center of gravity 144' of the snowmobile and the second center of gravity 144 forms an angle (λ) with horizontal that is between 35 and 90°. (See Figure 7, page 3, first full paragraph, and page 12, fifth full paragraph.)

Claim 10 - wherein a distance (z) between a vertical line passing through the forward-most drive track axle 121 and a vertical line passing through the center of gravity 140 of the rider in the standard position is between 15 and 65 cm. (See Figure 6 and page 2, fourth paragraph, and page 12, first full paragraph.)

Claim 16 - wherein a line passing through the forward-most drive track axle and the center of gravity of the rider in the standard position forms an angle (π) with horizontal that is between 41 and 75°. (See Figure 8, page 3, second full paragraph, and page 12, fourth full paragraph.)

Claim 20 - wherein a distance (Y) between a vertical line passing through the center of gravity of the snowmobile without the rider and a vertical line passing through the center of gravity of the rider in the standard position is between 5 and 55 cm. (See Figure 6, page 2, sixth paragraph and page 12, second full paragraph.)

Claim 26 - wherein a line passing through the center of gravity 144' of the snowmobile without the rider and the center of gravity 140 of the rider in the standard position forms an angle (ω) with horizontal that is between 39 and 79°. (See Figure 9, page 3, third full paragraph, and page 12, last full paragraph.)

Claim 30 - wherein a distance (X) between a vertical line passing through the center of gravity of the snowmobile with the rider 144 and a vertical line passing through the center of gravity 140 of the rider in the standard position is between 0 and 50 cm. (See Figure 6, page 2, fifth paragraph, and page 11, last full paragraph.)

Claim 36 - wherein a line passing through the center of gravity of the snowmobile with the rider 144 in the standard position and the center of gravity 140 of the rider in the standard position forms an angle (θ) with horizontal that is between 35 and 84°. (See Figure 10, page 3, fourth full paragraph and page 12, third full paragraph.)

Claim 40 - a steering device disposed on the frame and spaced forward of the seat such that, when the rider grasps the steering device in the standard position, the rider's torso is tilted toward the steering device and the rider's arms extend toward the steering device with the rider's elbows substantially over the rider's feet; ... wherein, for the standard rider in

the standard position, the seat defines a seat position, the steering device defines a steering position, and the footrests define a footrest position,

wherein a line passing through the seat position and the steering position forms angle α with a line passing through the seat position and the footrest position;

wherein a line passing through the footrest position and the steering position forms angle β with the line passing through the footrest position and the seat position,

wherein the line passing through the footrest position and the steering position forms angle γ with the line passing through the steering position and the seat position, and

wherein angle α is between 63 and 152°, angle β is between 16 and 84°, and angle γ is between 11 and 42°. (See Figures 2, 5 and 15-18, page 3, last paragraph, and page 10, paragraphs 2, 3 and 4.)

Claim 44 - a steering device disposed on the frame and spaced forward of the seat such that, when the rider grasps the steering device in the standard position, the rider's torso is tilted toward the steering device and the rider's arms extend toward the steering device with the rider's elbows substantially over the rider's feet; ... wherein, for the standard rider in the standard position, the seat defines a seat position, the steering device defines a steering position, and the footrests define a footrest position,

wherein a line passing through the seat position and the steering position forms angle α with a line passing through the seat position and the footrest position;

wherein a line passing through the footrest position and the steering position forms angle β with the line passing through the footrest position and the seat position,

wherein the line passing through the footrest position and the steering position forms angle γ with the line passing through the steering position and the seat position,

wherein angle α , angle β , and angle γ satisfy the relationship $\alpha \geq \beta \geq \gamma$; and

wherein a distance between vertical lines passing through the steering position and the seat position is between 40-90 cm. (See Figures 2, 5 and 15-18, page 3, last paragraph, and page 10, paragraphs 2, 3 and 4.)

Claim 45 - a steering device disposed on the frame and spaced forward of the seat such that, when the rider grasps the steering device in the standard position, the rider's torso is tilted toward the steering device and the rider's arms extend toward the steering device with the rider's elbows substantially over the rider's feet; ...wherein, for the standard rider in the standard position, the seat defines a seat position, the steering device defines a steering position, and the footrests define a footrest position,

wherein a line passing through the seat position and the steering position forms angle α with a line passing through the seat position and the footrest position;

wherein a line passing through the footrest position and the steering position forms angle γ with the line passing through the steering position and the seat position, and

wherein $\alpha \approx 2.5\gamma$. (See Figures 2, 5 and 15-18, page 3, last paragraph, and page 10, paragraphs 2, 3 and 4.)

Claim 46 - a steering device disposed on the frame and spaced forward of the seat such that, when the rider grasps the steering device in the standard position, the standard rider's torso is tilted toward the steering device and the rider's arms extend toward the steering device with the rider's elbows substantially over the rider's feet; ...wherein the seat defines a seat position and the steering device defines a steering position for the standard rider in the standard position, and

wherein a line passing through the steering position and the seat position forms an angle ϕ with horizontal that is between 15 and 51°. (See Figures 2 and 11, page 4, third full paragraph, and page 13, first full paragraph.)

Claim 55 - a windshield disposed forward of the steering device, the windshield having a top; wherein the seat defines a seat position and the steering device defines a steering position for the standard rider in the standard position, and wherein a line between the steering position and the seat position forms an angle μ with a line between the seat position and the top of the windshield that lies between 10° and 20°. (See Figure 2, page 5, first full paragraph and page 14, first paragraph.)

Claim 58 - a windshield disposed forward of the seat, the windshield having a top; wherein, when in motion, the windshield defines a laminar flow region of moving air that extends upwardly and rearwardly from the top thereof, and wherein, when seated in the seat and when grasping the steering device in the standard position, the rider's head is positioned within the laminar flow region. (See Figure 3, page 5, second full paragraph, and page 13, paragraphs 3 and 4.)

Claim 59 - a forward-most drive track axle 121 disposed on the frame forward of the pair of footrests; and a steering device disposed on the frame forward of the forward-most drive track axle. (See Figure 5.)

Claim 61 - wherein the snowmobile has a center of gravity without a rider and the steering device is disposed on the frame forward of the center of gravity, and wherein the forward-most axle is positioned forward of the center of gravity and rearward of a rearward-

most portion of the steering device such that the center of gravity is rearward of the rearward-most portion of the steering device, wherein the frame includes a tunnel, and the forward-most drive track axle is positioned on the tunnel. (See Figures 5-18.)

Claim 64 - wherein a distance (b) between vertical lines passing through the steering position and the standard seat position is between 40 and 90 cm. (See Figure 11, page 5, penultimate full paragraph, and page 12, last paragraph.)

Claim 73 - right and left sideboards extending laterally from the frame below the seat on either side thereof, each of the sideboards having a forward portion suitable for placement of a rider's foot thereon, the forward portion of each sideboard disposed at an angle Δ with horizontal that is -5° to -10° ; and right and left toe-holds disposed respectively above the rider's toes in a vertical plane for allowing the rider to releasably secure himself to the snowmobile. (See Figures 2 and 12, page 5, last paragraph, and page 11, third full paragraph.)

Claim 77 - wherein, for the standard rider in the standard position, the seat defines a seat position, the steering device defines a steering position forward of the forward-most axle of the drive track, and the forward portions of the sideboards define a footrest position,

wherein a line passing through the seat position and the steering position forms angle α with a line passing through the seat position and the footrest position;

wherein a line passing through the footrest position and the steering position forms angle β with the line passing through the footrest position and the seat position,

wherein the line passing through the footrest position and the steering position forms angle γ with the line passing through the steering position and the seat position, and

wherein angle α is between 63 and 152°, angle β is between 16 and 84°, and angle γ is between 11 and 42°. (See Figures 2, 5 and 15-18, page 3, last paragraph, and page 10, paragraphs 2, 3 and 4.)

Claim 81 - wherein, for the standard rider in the standard position, the seat defines a seat position, the steering device defines a steering position, and the forward portion of each said sideboard defines a footrest position,

wherein a line passing through the seat position and the steering position forms angle α with a line passing through the seat position and the footrest position;

wherein a line passing through the footrest position and the steering position forms angle β with the line passing through the footrest position and the seat position,

wherein the line passing through the footrest position and the steering position forms angle γ with the line passing through the steering position and the seat position, and

wherein angle α , angle β , and angle γ satisfy the relationship $\alpha \geq \beta \geq \gamma$. (See Figures 2, 5 and 15-18, page 3, last paragraph, and page 10, paragraphs 2, 3 and 4.)

Claim 82 - wherein, for the standard rider in the standard position, the seat defines a seat position, the steering device defines a steering position, and the forward portions of the sideboards define a footrest position,

wherein a line passing through the seat position and the steering position forms angle α with a line passing through the seat position and the footrest position;

wherein a line passing through the footrest position and the steering position forms angle γ with the line passing through the steering position and the seat position, and

wherein $\alpha \approx 2.5\gamma$. (See Figures 2, 5 and 15-18, page 3, last paragraph, and page 10, paragraphs 2, 3 and 4.)

Claim 84 - wherein the seat, each said footrest and the steering device are positioned and dimensioned with respect to one another so that the snowmobile 1) has a first center of gravity without the standard load and 2) has a second center of gravity when the standard load is in the standard position, and wherein a distance between a vertical line passing through the first center of gravity and a vertical line passing through the second center of gravity is between 0 cm and 14 cm. (See Figure 6, page 2, third full paragraph, and page 11, bridging paragraph.)

Claim 85 - A snowmobile having a center of gravity without a rider, comprising:

a frame including a pair of footrests each defining a forward-most surface, the frame including a tunnel defining an upper-most surface; ... a forward-most drive track axle disposed on the frame forward of the pair of footrests and forward of the center of gravity,

wherein an angle between a line passing through the forward-most drive track axle and the center of gravity and a horizontal line passing through the forward-most drive track axle is less than 55° ;

wherein the center of gravity is positioned below the upper-most surface of the tunnel, and

wherein the center of gravity is positioned in substantial alignment with the forward-most surface of each of said pair of footrests. (See Figure 8 and page 9, first full paragraph.)

Claim 86 - right and left sideboards extending laterally from the frame below the seat on either side thereof, each of the sideboards having a forward portion disposed at an angle Δ with horizontal that is -5° to -10° ; and right and left toe-holds associated with the right and left sideboards to allow the rider to releasably secure himself to the snowmobile. (See Figures 2 and 12, page 10, first full paragraph (toeholds), and page 11, third full paragraph (sideboards).)

Claim 87 - wherein the snowmobile has a first center of gravity without the rider and wherein the snowmobile is adapted to have a second center of gravity with the rider in the standard position such that, in use, a distance between a vertical line passing through the first center of gravity and a vertical line passing through the second center of gravity is between 0 cm and 14 cm. (See Figure 6, page 2, third full paragraph, and page 11, bridging paragraph.)

Claim 90 - wherein, for the standard rider in the standard position, the seat defines a seat position, the steering device defines a steering position, and the footrests define a footrest position, wherein a distance between vertical lines passing through the steering position and the seat position is between 40-90 cm. (See Figure 11 and page 12, last paragraph.)

Claim 92 - a frame including a tunnel; ... a steering shaft operatively connected to the two skis, the steering shaft being disposed over the engine at an angle ϵ of between 25° and 40° from vertical; wherein the tunnel supports a drive belt coupled to the engine and defines a footrest on each side of the seat that is inclined at an angle Δ with horizontal that is between

0° to -10°; and wherein a forward-most axle of the drive belt is positioned rearward of the steering shaft. (See Figures 2 and 12 and page 11, third full paragraph.)